

Environmental impacts need to be taken into account in nutrition recommendations

Increasing the share of vegetables, legumes, and fish in people's diets helps mitigate climate change, while reducing the loss of biodiversity. Both nutritional and ecological sustainability need to be considered in the Finnish nutrition recommendations.



Source: Healthy Diets From Sustainable Food Systems. Food Planet Health. EAT.

The environmental impacts of food must be reduced at all stages of food production and consumption. Reducing impacts require changes in agricultural subsidies. Food stores and restaurants can help make it easier for consumers to switch to using more plant-based foods by increasing their share in their selections.

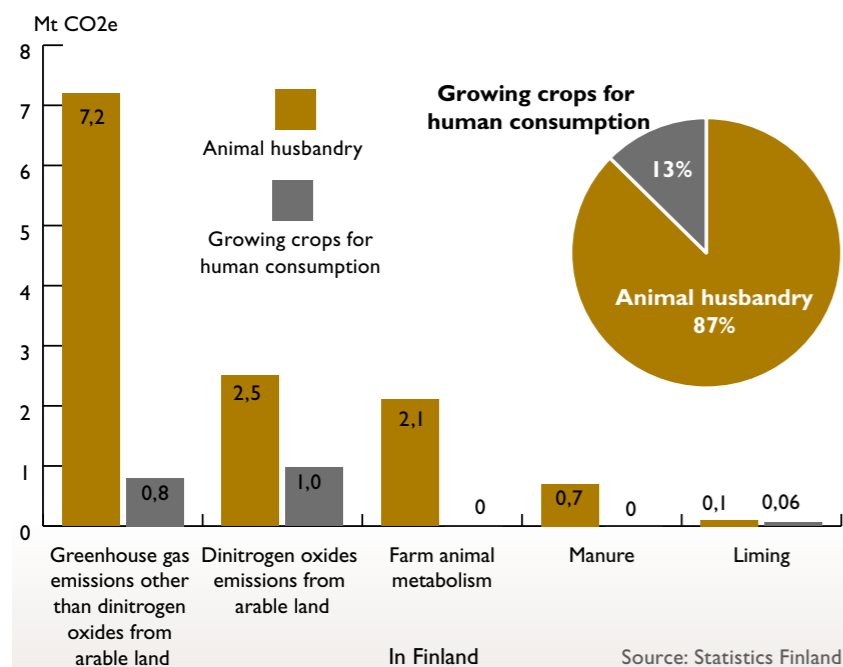
Schools and day care centres can introduce children to new tastes and to plant and fish-based eating. Children and young people need to be heard in the development of new recipes to ensure that the foods are palatable. Day care centres and schools should promote children's understanding of ecologically and nutritionally sustainable food.

Public kitchens are pioneers in the pivot toward sustainable eating. Kitchens need clear-cut criteria for the procurement of ingredients and the preparation of foods. The criteria must be based on researched information.

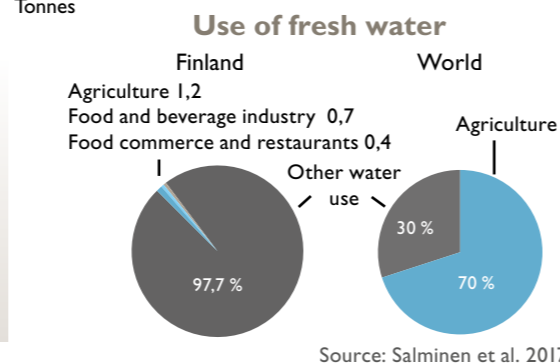
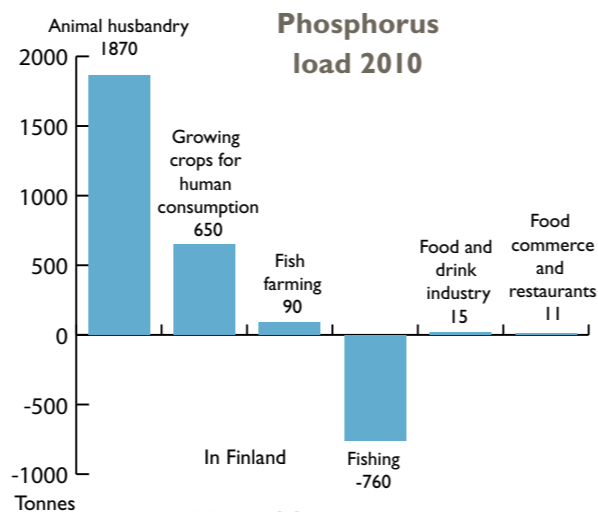


Production of meat and dairy stresses the environment

Greenhouse gas emissions 2017



Products derived from animal husbandry cause nearly 90 percent of the greenhouse gas emissions from agriculture. Greenhouse gas emissions from organic soils, such as peat soils, make almost 40 percent of emissions from agriculture, although organic soils covers only about 15 percent of the arable land.



Food choices affect the state of the environment

To be environmentally sustainable, a diet should include more vegetables and fish than now is the case and correspondingly less beef and pork, and other food derived from domesticated animals. Half of an ecologically and nutritionally sustainable plate of food comprises vegetables, fruit, and berries, and the other half contains whole grains, plant-based protein, unsaturated fats, and a moderate amount of animal-based protein¹.

Finnish agriculture focuses on the production of milk and meat. About 80 percent of cultivated land is used for the cultivation of plants used as fodder². The production of milk, meat, and

other animal-based agricultural products generates most of the emissions of greenhouse gases and nutrients coming from fields³. Fields with peaty soil account for slightly more than one tenth of the country's entire area of agricultural land but produce large amounts of greenhouse gases.

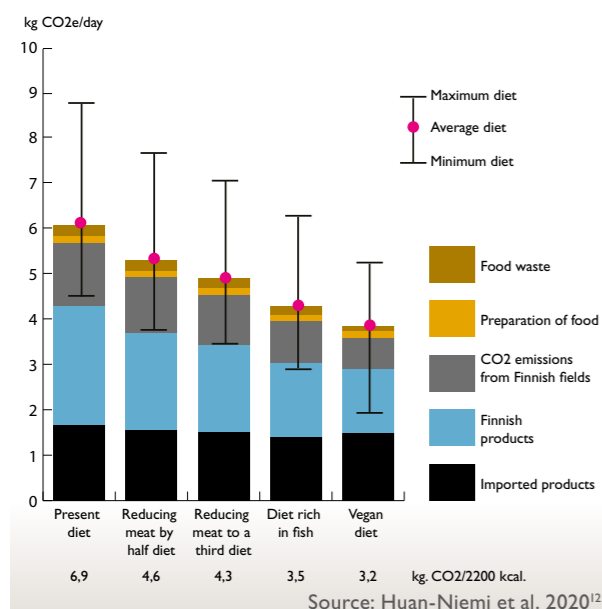
On the other hand, the grazing of cattle on natural meadows and in traditional landscapes helps maintain biodiversity in the countryside. Intensified land use has led to a decades-long decline in biodiversity in agricultural areas. Biodiversity can be promoted with measures such as a varied selection of crops, organic farming, and flower lanes⁴.

According to nutritional recommendations, Finns should increase their consumption of vegetables⁵. Environmentally and nutritionally sustainable diets are generally intertwined. Eating more beans and peas would be especially beneficial. A sustainable diet also includes fish, berries, and fungi.

Average annual per capita consumption of domestic wild fish is about 6.5 kilos. Based on the Fisheries statistics of Natural Resources Institute Finland the amount of wild fish that is caught could be increased fivefold. The use of Baltic herring and sprat in food consumption could easily be raised. Nowadays they are mostly used to produce animal feed. The consumption of domestic wild fish, such as Cyprinidae, could be increased by adding up fishing in inland waterways³. The whole value-chain from fishing, processing, logistics to retail and consumer products require further development efforts and investments.

When evaluating the environmental impacts of foods imported into Finland it is important to consider the emissions and water consumption caused by the products, as well as land-use changes in the countries of origin⁶.

Low emissions from plant and fish-based food



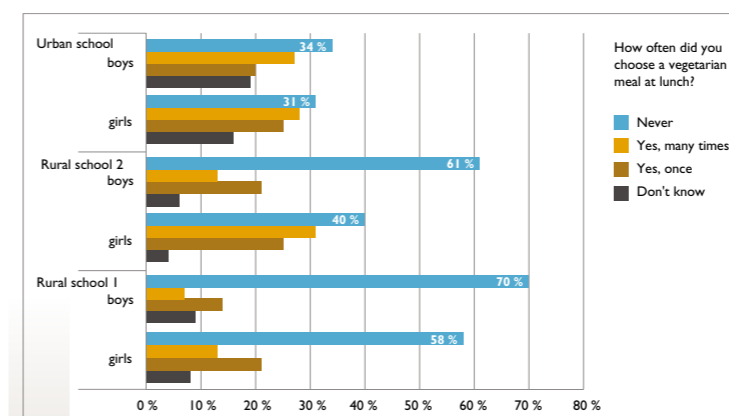
The impact of diet on the climate can be cut by 40 percent by reducing the use of products derived from domesticated animals and by maintaining the carbon stores of fields in Finland¹².

Habits do not change in a blink of an eye

Meatless days at schools have raised both enthusiasm and resistance among schoolchildren. It is important to engage children and young people in the development of school lunches to ensure that the food is more to their liking. Pupils in the upper levels prefer spicier foods⁷. In early education it is important for children to grow accustomed to new tastes.

Food demonstrations and tasting sessions can help teach sustainable eating habits. It is important for food services, teachers, and early education staff to increase cooperation in food education. Food education reinforces an overall understanding by children and young people on the environmental impacts, nutritional value, and social significance of food⁸. Food education needs to take into account children's age and sensitivity periods.

Boys living in the countryside take the most critical view of vegetarian food



There are differences between urban and rural schools in the popularity of vegetarian food in Finland⁷.



Public food services guide sustainable eating

Finnish nutrition recommendations⁹ are based on Nordic nutrition guidelines¹⁰. It is important to pay more heed to environmental criteria and broader principles of sustainable development when updating the nutrition recommendations.

In Finland public kitchens, especially in schools and day care centres, serve about 380 million meals each year. Studies show that public food services want to promote sustainable eating^{11,12}. Kitchens in schools and early education, and student cafeterias are guided by current nutrition recommendations to always have a vegetarian option available for all. Fresh vegetables and fruit should be included at snack time. Also on the private side, businesses may require adherence to nutrition guidelines in their staff cafeterias.

A guide for food procurement was published in 2017 by Motiva. The responsibility criteria take into account animal welfare, food safety, and some environmental and social impacts. The criteria are being updated in 2020.

Responsible procurement is encumbered by the fact that certified labelling systems have been developed only for a few types of foodstuffs. Similarly, many municipalities lack binding environmental goals that would steer procurements. Responsible procurements require new types of skills and capabilities from food services¹³.

Integration of environmental criteria in nutritional guidelines would give food services a shared knowledge base for responsible procurement and recipe development. National guidelines would help municipalities and public organisations in harmonising their strategic guidance for public procurement and service provision.

The environmental criteria should be based on comparable scientific methods and open public data.

Good examples in Finland

City of Turku - Carbon footprint calculator introduced

The results of the carbon footprint calculator for food services are used in the planning and monitoring of food service procurements.

Salo - Responsibility criteria for food procurement

The requirements apply to, for example, the use of antibiotics in raising livestock and the footprint index of broiler chickens. All of the whole meat products of the city's catering services are now of domestic origin.

Sodankylä - health and well-being from local food

Production technology has been set up at the municipal kitchen, enabling the use of local food direct from the farmer. Local food is also used in making semi-finished products and components for later use.

Kiuruvesi, Jyväskylä, Helsinki, Muurame - Making use of local fresh-water fish

For example, local kitchens in Kiuruvesi use pike, roach is used in Jyväskylä and Muurame, and bream in Helsinki.

Muurame - A climate-friendly menu

Schools have tested a climate-friendly menu that cut greenhouse gas emissions resulting from the food in half. Feedback has also been collected from pupils for the development of the menu.

Helsinki - Climate-friendly food

Vegetarian food is offered in schools and day care centres. Goals have been set to increase the proportion of plant-based food and reduce food waste in the city's carbon-neutral strategy.



Food policy needs to be changed

A nutritionally and ecologically sustainable food system can be achieved through dietary changes, reduction of food waste, and development of environmentally friendly agricultural methods. Comprehensive changes in food policy are also needed in Finland.

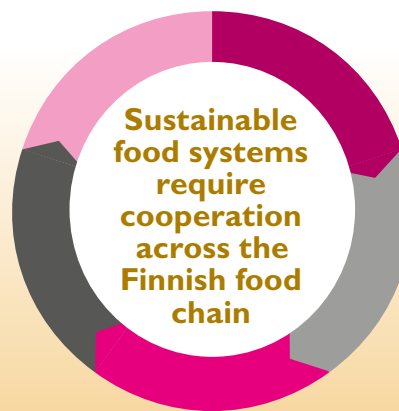
Both the agricultural support system and environmental regulations must be changed to support environmentally and nutritionally sustainable food production. Agricultural policy and food policy need to be predictable. In such a situation both primary production and the food industry are better prepared to make the investments needed for future. Health- and environment-based incentives should be examined together. This is important when comparing the cost-effectiveness and fairness of different taxation models.

Consumption

- Integration of environmental criteria in nutrition recommendations
- Health and environmental labels for foods
- Health- and environment-based taxation

Retail

- Nudging and informing consumers on sustainable and healthy foods
- Advertising sustainable and healthy foods



Primary production

- Development of agricultural subsidies to promote the reduction of greenhouse gas emissions and the nutrient load, recycling nutrients, increasing meadow areas and crop diversity.
- Ending the clearing of peat fields and reallocation of arable land between farms

Processing

- Investments into new domestic plant-based value chains
- Developing value chains in fishing

Source: Huan-Niemi et al. 2020¹²

Food services and restaurants

- Increasing the use of domestic plant-based protein and fish in cooking and developing recipes
- Food education in schools and in early education

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More sustainable food for Europe

The EU is one of the world's most important importer and exporter of food products. In 2020 the Commission launched its Farm to Fork Strategy. Its aim is a fair food system which promotes health and protects the environment. Means to this end include changes in agricultural policy and taxation practices, as well as minimum requirements for public procurements.

Farm to Fork Strategy

<https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1590404602495&uri=CELEX:52020DC0381>

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